CONERGENCE OF FIXED AND MOBILE NETWORKS AS A MARKET LEVERAGING TOOL FOR SRI LANKA TELECOM

MASTER OF BUSINESS ADMINISTRATION

IN

MANAGEMENT OF TECHNOLOGY

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January, 2007

CONERGENCE OF FIXED AND MOBILE NETWORKS AS A MARKET LEVERAGING TOOL FOR SRI LANKA TELECOM

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This Dissertation was submitted to the Department of Management of Technology of the University of Moratuwa in partial fulfillment of requirement for the Degree of Master of Business Administration.

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January, 2007

DECLARATION

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person except where due reference is made in the text."

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ABSTRACT

Fixed-Mobile Convergence (FMC) is an attempt to exploit synergies between wireless and wire line technologies to deliver new capabilities. Fixed Mobile Convergence concept is becoming important for telecom operators to survive in the market. The problem focused in this research is "How can integrated fixed–mobile operators leverage their presence in both markets to offer converged services that are simple to use and simple to understand for the mass market consumer?". There are four types of convergence identified for a full FMC, namely; network convergence, device convergence, lifestyle convergence and application convergence. FMC is becoming "buzz word" in world telecommunication industry and most of the operators are in the process of implementing FMC in their networks. Also most of the countries are preparing for FMC by changing their telecommunication regulations. There are many success stories of FMC and those who implemented the FMC could be able to leverage the market. Sri Lanka is a country which adopts new technologies very quickly when world is moving towards new technologies. There are four fixed line and four mobile operators in Sri Lanka.

In this research, the focus was on network convergence and, research was limited to Sri Lankan integrated operator Sri Lanka Telecom and Mobitel. This research was limited to these two companies because, those are the only integrated companies in the telecom field during the period this research was conducted and data collection from other companies was not possible due to competition and company policies. One main objective with three sub-objectives was developed to conduct this research. Quantitative and qualitative methods were used to analyze the data. A survey was conducted among technical staff of above two companies. Two cases of international implementation of FMC and two cases on international regulation for FMC were analyzed. Through those data, combining secondary data from literature survey conclusions were drawn and few recommendations were given. Also this report has guided for future research on this area.

ACKNOWLEDGEMENT

I could make this research a success due to assistance I got from different people. First of all I would thankful to my supervisor Mr. Kithsiri Samarasinghe in providing proper guidance to conduct the research and help me whenever I faced problems while conducting the research. His guidance was valuable for me in conducting the research. Next thanks should go to lectures and staff of Department of Management Of Technology, giving me assistance on acquiring knowledge on MBA and conducting research. I would also thank to administrative staff in the department in assisting me on administration related works required to complete this research. My sincere thanks go to my colleges in Sri Lanka Telecom and Mobitel who helped me on distributing, completing and collecting my survey questionnaires. I also thankful to my MBA batch colleges in assisting me on conducting this research and giving suggestions to improve my research. Finally my special thanks go to my wife and other family members who encouraged, supported and helped me to complete this research on time and successfully.

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ABBREVIATIONS

3G	3rd Generation
3GPP	3rd Generation Partnership Projects
ADSL	Asymmetric Digital Subscriber Line
AP	Access Point
BT	British Telecom
CAPEX	Capital Expenditure
CDMA	Code Division Multiple Access
CPP	Calling Party Pays
DSL	Digital Subscriber Link
ETSI	European Telecommunications Standards Institute
FAP	Fixed Access Point
FMC	Fixed Mobile Convergence
FMCA	Fixed-Mobile Convergence Alliance
FMS	Fixed-Mobile Substitution
FT	France Telecom
FTE	Fixed Terminal Equipment
GAN	Global Action Network
GPRS	General Packet Radio Service
GSM	Global System for Mobile communication
HSDPA	High Speed Download Packet Access
ICT	Information Communication Technology
IMS	IP Multimedia Subsystem
IP	Internet Protocol
ITU	International Telecommunication Union
LAN	Local Area Network
MMS	Multi-media Messaging System
MNVO	Mobile Network Virtual Operator
MPP	Mobile Party Pays
NGN	Next Generation Networks
OFTA	Office of the Telecommunications Authority
OMA	Open Mobile Alliance

OPEX	Operation Expenditure
PBX	Private Branch Exchange
PDA	Personal Digital Assistance
QoS	Quality of Service
SIP	Session Initiated Protocol
SLT	Sri Lanka Telecom
SMS	Short Messaging System
TISPAN	Telecoms & Internet converged Services & Protocols for Advanced Networks
TRC	Telecommunication Regulatory Commission
UMA	Unlicensed Mobile Access
UMTS	Universal Mobile Telecommunication System
VCC	Voice Call Continuity
VoIP	Voice over Internet Protocol
WCDMA	Wide Code Division Multiple Access
Wi-Fi	Wireless Fidelity
WiMAX	Worldwide Interoperability for Microwave Access
WLAN	Wireless Local Area Network